



## PATENT ABSTRACTS OF JAPAN

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**(54) CATALYST FOR PURIFYING EXHAUST GAS FROM DIESEL ENGINE**

**(57) Abstract:**

**PROBLEM TO BE SOLVED:** To obtain the superior nitrogen oxide conversion rate on a continuous lean fuel-air mixture operation zone by additionally providing a second functional layer with hydrocarbon storage function for a catalyst having two functional layers consisting of a first layer of nitrogen oxide storage function and the second layer of catalyst function.

**SOLUTION:** A catalyst for converting a nitrogen oxide in an oxygen rich exhaust gas from a diesel engine under the optimum utilization of a reducing component contained in exhaust gas is provided with a second functional layer absorbing the catalyst activities and also hydrocarbon contained in a lean exhaust gas and formed on a first functional layer of function of storing the nitrogen oxide. As an acidic carrier material for the

catalyst activity component in the second functional layer, for example, aluminum silicate, silicon dioxide, titanium oxide or zirconium oxide can be used. The second functional layer contains aluminum-removed Y-zeolite, zeolite ZMS5, aluminumremoved mordenite or a mixture of them.

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